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10/750,593	12/31/2003	Joseph Patino	CE11882JEM	8591

7590 11/01/2007  
Larry G. Brown  
Motorola, Inc.  
Law Department  
8000 West Sunrise Boulevard  
Fort Lauderdale, FL 33322

EXAMINER
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BOATENG, ALEXIS ASIEDUA

ART UNIT	PAPER NUMBER
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2838

MAIL DATE	DELIVERY MODE
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11/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/750,593

Applicant(s)

PATINO ET AL.

Examiner

Alexis Boateng

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-14, and 16 - 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-14, and 16 - 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 4, 6, 10 – 12 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Toya (U.S. 6,040,680).

**Regarding claims 1 and 19,** Toya discloses a method for charging a battery, comprising the steps of:

supplying a charging current to a battery through a first charging circuit (figure 2 item 120; column 6 lines 1 – 8);

sensing the charging current to the battery (figure 2 item 125);

selectively signaling an electric device from the battery to indicate at least one parameter of the battery as the battery is receiving the charging current (column 6 lines 29 – 56);

in response to selectively the electronic device, disabling a second charging circuit (column 6 lines 1 – 8: the protection circuit cuts of the current supplied to the control circuit, item 120, which disables the circuit).

**Regarding claim 2,** Toya discloses wherein the charging current is from a wireless charger (figure 1 item 101).

**Regarding claims 3 and 12,** Toya discloses wherein the parameter is at least one of a charging state of the battery and predetermined current threshold of the charging current (column 6 lines 1 – 8 and lines 41 – 57).

**Regarding claim 4,** Toya discloses wherein the battery signals the electronic device over an input/output line and wherein the input/output line is a preexisting reading conductor (figure 2 item 105).

**Regarding claim 6,** Toya discloses wherein the second charging circuit (figure 2 item 127) is located in the electronic device (the battery is intrinsically located within the electronic device). For an alternative view wherein the charging circuit is inside the electronic device, see the 103 rejection below.

**Regarding claim 10,** Toya discloses a method for charging a battery, comprising the steps of:

an electronic device (figure 1 item 103);

a charger (figure 2 item 101); and

a battery (figure 2 item 111), wherein the battery supplies power to the electronic device wherein the charger supplies a charging current to a battery through a first charging circuit (figure 2 item 120; column 6 lines 1 – 8); and wherein the battery includes a charging monitor that senses the charging current (figure 2 item 125);

selectively signaling an electric device from the battery to indicate at least one parameter of the battery as the battery is receiving the charging current (column 6 lines 29 – 56: current sensing circuit 125 indicates that the battery is receiving charge);

in response to selectively the electronic device, disabling a second charging circuit (column 6 lines 29 – 56: charging circuit 123 is stopped).

**Regarding claim 11**, Toya discloses wherein the charger is wireless charger (figure 1 item 101; column 1 lines 1 – 17) and the charging monitor is a processor (column 7 lines 24 – 38).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-5, 13, and 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Toya (U.S. 6,040,680) in view of Watts (U.S. 2002/0175658).

**Regarding claims 4, 5, 13 and 14**, Toya does not disclose the invention as claimed. Watts discloses in figure 2 wherein the battery signals the electronic device over an input/output line, figure 2 items 16 and 17, and wherein the input/output line is a preexisting reading conductor, figure 2 item 15. Watts discloses wherein the preexisting reading conductor is a thermistor, figure 2 item 15. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Toya system with the Watts system so that the controller can monitor the temperature and charging operations of the system.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toya (U.S. 6,040,680) in view of Goto (U.S. 5,600,225).

**Regarding claim 6,** Toya does not disclose the invention as claimed. Goto discloses in figure 2 wherein the second charging control circuit, item 209 is located within the electronic device. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Toya system with the Goto system so that the electronic device controls its own charging to prevent damage of the device.

6. Claim 7-8, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toya (U.S. 6,040,680) in view of Sengupta (U.S. 6,320,354).

**Regarding claim 7 and 16,** Toya does not disclose wherein the method comprises the step of updating a charging indicator of the electronic device. Sengupta discloses in column 5 lines 52 – 65 wherein a charge indicator is used to identify the level of charge. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Toya system with the Sengupta system so that the system shows the user when the battery needs to be charged and when charging should be stopped.

**Regarding claim 8 and 17,** Toya does not disclose the invention as claimed. Sengupta discloses in column 3 line 50 – column 4 line 33 wherein controller toggles the between input/output line between a high state, a low state and a release state during the signaling step. At the time of invention, it would have

been obvious to a person of ordinary skill in the art to modify the Toya system with the Sengupta system so that controller can be recharged.

7. Claims 9 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Chao (U.S. 6,057,668) in view of Sengupta (U.S. 6,320,354).

**Regarding claim 9**, Chao discloses supplying a charging current from a wireless charger to a battery in column 1 lines 47 – 45 and sensing a the charging current in figure 1 item 12. Chao further discloses in figure 1 item 134 and in column 3 line 6 – 18 wherein the battery indicates to the electronic device at least one parameter of the battery as the battery is receiving the charging current. Chao discloses the invention as previously claimed, but does not disclose the remainder. Sengupta discloses in column 3 line 50 – column 4 line 33 wherein the system selectively switches between high, release and low states an input/output lines between an electronic device, wherein the release state is a value that is between the high and low states. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Chao system with the Sengupta system so that controller can be recharged.

**Regarding claim 18**, Chao discloses in column 1 lines 6 –10 wherein the charger is used is contact-free, but does not disclose wherein the charging monitor is a processor. Sengupta discloses in figure 5 item 507 (identified as item 506 in specification), wherein the charging monitor is a processor. At the time of invention, t would have been obvious to a person of ordinary skill in the

art to modify the Chao system with the Sengupta system because it is more efficient to monitor the charge by using specific programs.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sengupta (U.S. 6,320,354) in view of Toya (U.S. 6,040,680).

**Regarding claim 20**, Sengupta discloses an electronic device comprising a processor (figure 5 item 507); an input/output line coupled to the processor (figure 4 items 414 (output line) and 416 (input line)); a charging circuit (figure 5 item 404); a charging indicator (figures 7-9); wherein the processor is programmed to detect signals over the input/output line and in response to the detection of the signals (column 3 line 50 – column 4 line 33), and updating the charging indicator (column 5 lines 52 – 65). Sengupta discloses the invention as claimed, but does not disclose wherein a second charging circuit and the processor is further programmed to perform at least one of disabling the second charging circuit. Toya discloses in column 6 lines 1 – 8 wherein charging is ceased when it becomes too high. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Sengupta system with the Toya system so that damaging overcharge is prevented.

### ***Response to Arguments***

8. Applicant's arguments filed 8/13/07 have been fully considered but they are not persuasive. **Regarding claim 1**, the applicant argues that the Toya reference does not disclose wherein the battery includes the first charging circuit and provides power to an



electronic device, that the electronic device includes the second charging circuit and that the second charging circuit is capable of directing charging current to the battery is charging is being fed to the device. Toya discloses in figure 2 wherein the coil, item 114 provides power to the battery, item 111, and the device via terminals 105. Toya also discloses wherein column 6 lines 1 – 8: the protection circuit cuts of the current supplied to the control circuit, item 120, which disables the circuit. The battery pack's circuit as disclosed in figure 4 is comprised within the electronic device. **Regarding claims 9 and 18**, the applicant argues wherein there is no release state of charging in between the high and low states. Sengupta discloses column 5 lines 52 – 65 wherein a release step is provided in between the conducting state and non-conducting state. **Regarding claim 20**, the applicant argues that there is no motivation to combine the Sengupta reference with the Toya reference. . In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Sengupta and Toya references are both systems for charging a battery of a device. The Toya reference provides wireless charging which ensures a greater quality of charging.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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AB

  
**BAO Q. VU**  
**PRIMARY EXAMINER**